

## 时钟振荡器 Clock Oscillator: KS508T KS708T

### Feature 特征

- Programmable clock oscillators (CMOS, PECL, LVDS, CML, HCSL output logic) 可编程输出逻辑
- Typical phase jitter as low as 150fs RMS 相位噪声低, 适用于噪声敏感应用
- Embedded bypass capacitor for improved noise performance and easier board design 内嵌旁路电容, 提升抗干扰性能, 简化电路设计
- Short production lead time to support fast time-to-market 快速交货
- Ideal for high-speed communications, data centers, networking, industrial and A/V system 适用于高速通信, 数据中心, 网络设备, 工业控制, 音响视频系统等



### General Specifications 规格参考

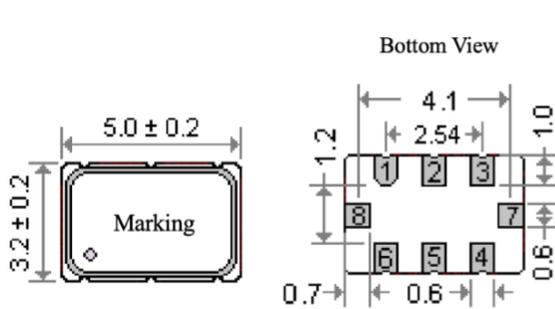
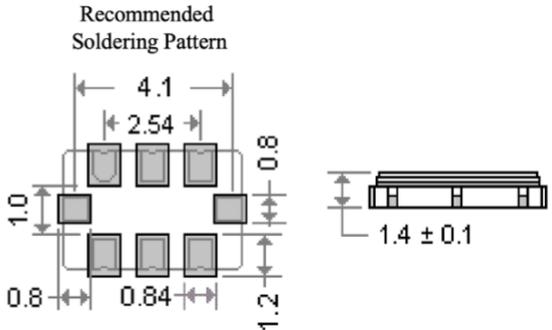
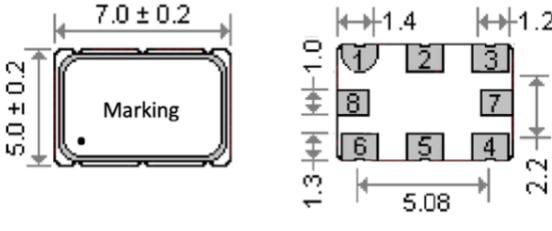
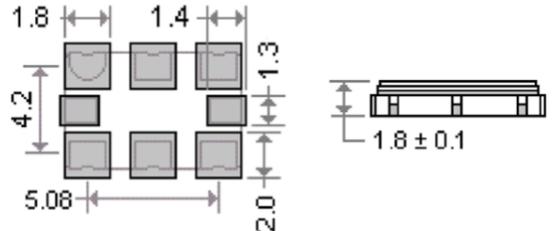
PARAMETER	性能参数	KS508T	KS708T
Frequency Range	频率范围	150.0MHz~250.0MHz	
Supply Voltage	供电电压	1.8V/2.5V/3.3V (±10%)	
Output Logic	输出波形	CMOS	
Frequency Tolerance	调整频差	±5ppm ~ ±30ppm	
Frequency Stability	温度频差	见下表	
Operating Temperature Range	温度范围	见下表	
Current Consumption	工作电流	90mA max.	
Output Load	输出负载	15pF	
Start-up Time	起振时间	10ms max.	
Duty Cycle	占空比	40~60%	
Rise & Fall Time	上升下降时间	5ns max.	
Output Logic High "1"	输出电平 高	0.9V <sub>dd</sub> min.	
Output Logic Low "0"	输出电平 低	0.1V <sub>dd</sub> max.	
Output Enable/Disable Time	启动/禁用时间	Enable: 2.5ms max.; Disable: 10μs max.	
RMS Phase Jitter	抖动	150 fs typ. (12KHz~20MHz)	
Storage Temperature Range	储存温度范围	-55°C ~ +125°C	
Aging Per Year	年老化率	±3ppm ~ ±5ppm/year	

#### Frequency Stability 温度频差 VS Operating Temperature Range 温度范围

Temp. Code	Temp.\ppm	±20	±25	±30	±50	±100
B	-20~70°C	○	○	○	○	○
C	-40~85°C		○	○	○	○
E	-40~105°C				○	○
F	-55~125°C					○

NOTE: Please consult for other specifications 若有其它规格需求请告知

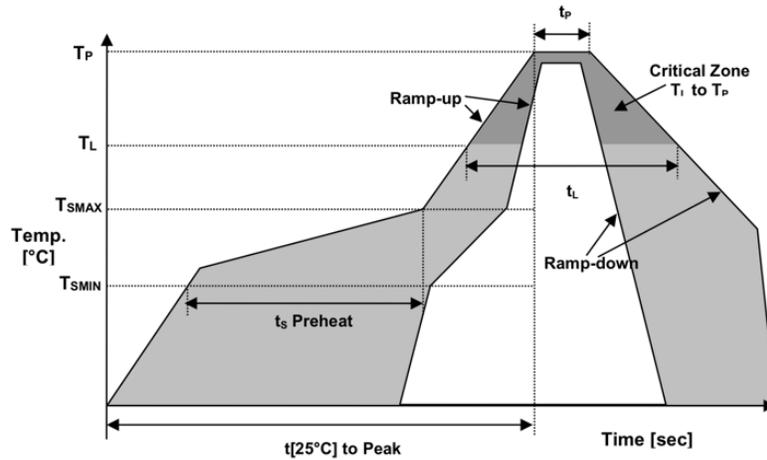
### ■ Outline Dimensions (Unit: mm) 外形尺寸

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### ■ Part Number Guide 产品编号

<b>KS508T</b>	-	<b>156.250</b>	-	<b>33</b>	-	<b>C</b>	-	<b>30</b>	-	<b>NS</b>
↓		↓		↓		↓		↓		↓
型号	-	标称频率	-	工作电压	-	工作温度	-	温度频差	-	特殊要求
'KS': 非差分系列		(In MHz)		18=1.8V 25=2.5V 33=3.3V		B: -20~+70°C C: -40~+85°C E: -40~+105°C F: -55~+125°C		10 = ±10ppm 20 = ±20ppm 30 = ±30ppm 50 = ±50ppm 100 = ±100ppm		'NS':特殊要求

■ Reflow Profile 回流焊



Temperature Min Preheat	最低预热温度	$T_{smin}$	150°C
Temperature Max preheat	最高预热温度	$T_{smax}$	200°C
Time ( $T_{smin}$ to $T_{smax}$ )	时间差	$T_s$	60~120 sec
Temperature	温度	$T_L$	217°C
Peak Temperature	最高温	$T_p$	260 °C
Ramp-up Rate	升温速度	$R_{up}$	3°C/sec max
Ramp-down Rate	降温速度	$R_{down}$	6°C/sec max
Time within 5°C of Peak Temperature	最高温度停留时间	$t_p$	30 sec
Time $t[25^\circ\text{C}]$ to peak temperature	25度到最高温度时间	$t[25^\circ\text{C}]$ to peak	480 sec
Time	时间	$t_L$	60~150 sec